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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,183	02/18/2004	Tamraparni Dasu	2003-0107	4539
26652	7590	07/18/2006	EXAMINER	
AT&T CORP. ROOM 2A207 ONE AT&T WAY BEDMINSTER, NJ 07921			BROWN JR, NATHAN H	
			ART UNIT	PAPER NUMBER
			2121	

DATE MAILED: 07/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/782,183	Applicant(s) DASU ET AL.	
	Examiner Nathan H. Brown, Jr.	Art Unit 2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE (3) MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Examiner's Detailed Office Action

1. This Office is responsive to application 10/782,183, filed February 18, 2004.
2. Claims 1-20 have been examined.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 11, 2 and 12, 3 and 13, 6 and 16, and 10 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by *Gobat* (USPN 5,933,836).

Regarding claims 1 and 11. *Gobat* teaches a data quality auditing tool and method (*see col. 1, lines 39-50, Examiner interprets the "Intelligent Data Module (IDM)" to be an auditing tool implementing an auditing method.*), comprising: a rule-based programming data analyzer that compares received data to be audited against a set of rule-based criteria (*see col. 2, lines 52-62, Examiner interprets "IDM 115-2" to be a rule-based programming data analyzer. Examiner interprets the rule antecedents to contain a set of rule-based criteria (see Fig. 8).*) and identifies

as unacceptable data that data which violate the rule-based criteria (*see* col. 2, lines 52-62, “If the data is found to be consistent, then IDM 115-2 supplies the requested data to its associated operations application ... Otherwise, IDM 115-2 proceeds in accord with one of a number of different options ... including the option to suspend the request for the data until the data is reconciled ...”).

Regarding claims 2 and 12. *Gobat* teaches the tool and method, respectively, (*see* above) wherein the rule-based criteria are business rules and data conventions (*see* Fig. 8, “then if M_tbl_date_rpt is less than seven day before current date”, *Examiner interprets the “then if” construct to be a rule-base criterion (i.e., a criterion in a rule) that comprises a business rule and data conventions (i.e., the “if M_tbl_date_rpt ...” is a rule on a business object (report date) where “M_tbl_date_rpt” is a data naming convention.)*

Regarding claims 3 and 13. *Gobat* teaches the tool and method, respectively, (*see* above) wherein the rule-based criteria are data rules represented as constraints on data which must be met (*see* Fig. 8, *Examiner interprets “if M_tbl_date_rpt is less than seven days before current date” to be a data rule comprising a constraint on the datum M_tbl_date_rpt.*)

Regarding claims 6 and 16. *Gobat* teaches the tool and method, respectively, (*see* above) wherein the constraints are static and are applied through the comparison against the data as is (*see* Fig. 7 and col. 2, lines 7-9, *Examiner notes that the encoded constructs are all static (i.e., not strings, created on the fly, to be executed using a function call).*).

Regarding claims 10 and 20. *Gobat* teaches the tool and method, respectively, (*see above*) wherein the analyzer further comprises an action functionality that implements actions to be taken on the data as specified by the one or more rules selected for execution (*see col. 6, lines 58-67, "If, on the other hand, the program (607) determines that the data object failed one or more rules, then the program (block 608) may apply so-called correction rules stored in rule base 120-1 ...".*).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Gobat* in view of *Hay*, "A REPOSITORY MODEL - BUSINESS RULES - Part II (Action Assertions)", 2002.

Regarding claims 4 and 14. *Gobat* teaches the tool and method, respectively (*see above*). *Gobat* does not teach the tool and method, wherein the constraints represent business rules and data conventions. *Hay* does teach the tool and method, wherein the constraints represent business

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rules and data conventions (see para. 2, “Business rules are constraints ...”, *Examiner asserts the converse is also true in the context of the reference.*). It would have been obvious at the time the invention was made to persons having ordinary skill in the art to combine *Gobat* with *Hey* to organize Terms and Facts as structural assertions and business rule constraints as action assertions.

7. Claims 5 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Gobat* in view of *Ceri et al.*, “Deriving Production Rules for Constraint Maintenance”, 1990.

Regarding claims 5 and 15. *Gobat* teaches the tool and method, respectively (*see above*). *Gobat* does not teach the tool and method, wherein the constraints comprise expert system production rules. However, *Ceri et al.* do teach constraints which comprise expert system production rules (*see Abstract*, “For each constraint ...”). It would have been obvious at the time the invention was made to persons having ordinary skill in the art to combine *Gobat* with *Ceri et al.* to provide an alternative approach to the repair of inconsistent states using production rules.

8. Claims 7 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Gobat* in view of *Plale et al.*, “dQUOB: Managing Large Data Flows Using Dynamic Embedded Queries”, 2000.

Regarding claims 7 and 17. *Gobat* teaches the tool and method, respectively (*see above*). *Gobat* does not teach the tool and method, wherein the constraints are dynamic and are applied through

the comparison against data flows. *Plale et al.* do teach dynamic constraints applied through the comparison against data flows (*see* p. 3, Fig. 1 and §3 dQUOB System Overview, “The dQUOB system is a tool for creating queries with associated computation, and dynamically embedding these query/action rules into a data stream.”, *Examiner interprets:*

*(d.latitude_min <= -27.7 and
d.latitude_max <= -63.68 and
d.longitude_min = 0.0 and
d.longitude_max = 360.0 and
d.level_min >= 30 and
d.level_max <= 36) and
(d.latitude_min >= r.latitude_min and
d.latitude_max <= r.latitude_max and
d.longitude_min = r.longitude_min and
d.longitude_max = r.longitude_max and
d.level_min = r.level_min and
d.level_max = r.level_max) and
d.timestep % 12 = 0).*

in Rule C:1: query to be constraints.)

9. Claims 8 and 18 and 9 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Gobat* in view of *Klein*, “Supporting Conflict Resolution in Cooperative Design Systems”, 1991.

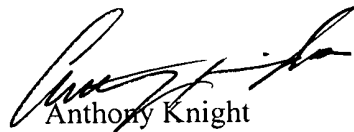
Regarding claims 8 and 18. *Gobat* teaches the tool and method, respectively, wherein the analyzer comprises a match functionality that compares received data records representing the data to be audited against the set of rule-based criteria (*see* col. 6, lines 41-55). *Gobat* does not teach generating a conflict set of one or more candidate rules which are met. However, *Klein* does teach generating a conflict set of one or more candidate rules which are met (*see* p. 3, §3.1. Conflict Resolution: A Distinct Kind of Problem Solving Expertise, *Examiner interprets* “the set

*of potentially applicable rules” to be a conflict set.)). It would have been obvious at the time the invention was made to persons having ordinary skill in the art to combine *Gobat* with *Klein* to express domain and control expertise separately, so that each kind of expertise is available in its original, more succinct form where it is much more understandable and easier to reason with.*

Regarding claims 9 and 19. *Gobat* teaches the tool and method, respectively, wherein the analyzer comprises a match functionality (*see above*). *Gobat* does not teach the analyzer further comprising a conflict resolution functionality that assigns priority among and between the one or more candidate rules which are met and selects one or more rules for execution. *Klein* does teach such a conflict resolution functionality (*see p. 3, §3.1. Conflict Resolution: A Distinct Kind of Problem Solving Expertise, Examiner interprets the “ simple built-in syntactic criteria for deciding what rules run first” of OPS5 to be a conflict resolution functionality that assigns priority among and between the one or more candidate rules to select one or more rules for execution.*). It would have been obvious at the time the invention was made to persons having ordinary skill in the art to combine *Gobat* with *Klein* to overcome limitations of the conflict resolution functionality of early languages like OPS5.

Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan H. Brown, Jr. whose telephone number is 571-272- 8632. The examiner can normally be reached on M-F 0830-1700. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 571-272-3687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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July 6, 2006